

Energy Sector Capacity Building Monitoring & Evaluation (M&E) Framework and Tools

May 5, 2015



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ESCB: helping secure Jordan's energy future

ISSUE

96%

percent of Jordan's energy that is imported

24%

percent of Jordan's GDP spent on energy imports

595 million JD

total government subsidy for electricity consumption, 2014

ESCB's APPROACH

ESCB applies a broad, adaptable approach to meet the energy sector's evolving needs.

- Development and implementation of a framework to enable utility-delivered energy efficiency programs
- 2. Capacity building and institutional strengthening for public and private sector energy institutions
- **3.** Strengthened presence, capacity and regulation of **energy services companies**
- 4. Flexible response mechanism for emergent energy sector needs



FOUNDATIONS

M&E RESULTS FRAMEWORK AND INDICATORS



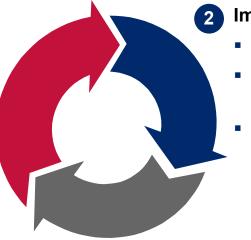
The ESCB M&E approach promotes continuous learning to achieve development results

THREE ITERATIVE STEPS



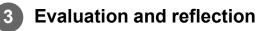
Strategy and target setting

- Work plan sets out a strategy for program implementation
- PMP defines specific indicators and targets to measure progress towards success
- M&E Database and Dashboard facilitate continuous data exploration and learning



Implementation and monitoring

- Timely data collection
- *Quarterly reviews* of progress towards indicator targets data
- *Implementation adaptations* based on data findings, with USAID approval



Annual review of overall PMP



ESCB's performance indicators

ESCB Objective / USAID PMP IR Level

- GHG emissions, estimated in metric tons 1. of CO2e, reduced, sequestered and/or avoided as a result of USG assistance
- 2.
- *Number of entities implementing CE* measures as a result of USG assistance

USAID Sub-IR Level

- 3. Number of institutions receiving technical assistance due to USG assistance
- 4. Validated savings from utilities' forecasted electric demand due to incentive mechanism demand-side-management/clean energy programs
- Number of megawatts installed through 5. alternative energy projects in Jordan supported by USG assistance

6. Number of clean energy transactions

Number of laws, policies, strategies, plans, agreements, or regulations addressing clean energy officially proposed, adopted, or implemented as a result of USG assistance

ESCB Activity Level

- ESPs accreditation governing body established 8.
- Number of ESPs accredited 9.
- 10. Proportion of female participants in USGassisted programs designed to increase access to productive economic resources
- Person-hours of training completed in technical 11. energy fields supported by USG assistance

KEY

- Blue: Standard USAID Foreign Assistance (F) Indicator
- USAID/Jordan PMP Indicator Red:
- Black: ESCB Custom Indicator



COLLECTING & STORING DATA

INPUT TOOLS & DATABASE



The ESCB M&E toolkit facilitates the timely collection and analysis of performance data

	M&E Data Input Tools	M&E Database	M&E Dashboard
	ESCE Manual Information State Name ESCE Information State Name	Construction of the second of the secon	
PURPOSE	Systematically collect useful data on project activities	Centrally validate and store ESCB performance indicator data	Facilitate conversations on ESCB's impact to date through data visualization
TECHNICAL ENVIRONMENT	Microsoft Excel	Microsoft Excel	<i>Updating:</i> Tableau Desktop (license required) <i>Viewing:</i> Tableau Reader



Data Input Tools

Database

Dashboa

Each data input tool includes an easy-to-use graphical user interface (e.g. form)

Example Input Tool

ESCB	Action Plan Information S	iheet	Each form is clearly labeled, with a tailored input tool for different types of activities
Action Plan Name Exter the name of the action plan			toor for unreferit types of activities
Action Plan Description Provide 3-8 serviceus describing the action prioris acope and key declaters	Oeta Vertilication POC Select the name of the individua who can provide technical vertication of this data entry. If the pieton is not in the list, add them to the "Data Vertication Points of Contact" table in the "People" tab.	<	Instructions on what details to include in each field is provided
Point of Contact Enter the name of the technical lead (typically the component lead) for the project	Ratevient Task Ordicate the relevant task (* readings task		Drop-down menus facilitate data validation,
Action Plan Status	Adam Anal A Alco Main Andra China Anton Festina Anton Festina Anton Festina Bill Adel Bill Adel Dista Status Dista Status		reducing human error. Each form also asks for point of contact and source documentation, to
Action Man Status	Bran Cartel - Portrait Mill CDTY		ensure traceability of data
Action Plan Status	Proposed / In Review Date of Status Cha Proposed / In Review Points, VANDONY Ex. 010014		
Action Plan Status	Pinalized Date of Status Chu Pinalized Pernal WMDDINY		We only collect data that is helpful for
Action Plan Street	As ptoting Used Status Char Assard Approved Format WebConne Ex pt. data		decision-making. If we don't plan to use it, we don't spend time collecting it.



Energy Sector Capacity BuildingData Input ToolsDatabaseData Sector Capacity Building

Form information auto-populates a back-end spreadsheet for easy transfer to the M&E database

Example Input Tool

Database Table: 8 - Action	Plans				
Instructions Copy-paste-value the contents of each tab of the ESCB Monitoring and Evalua		esponding columns in a new row in t	he "8 - Action Plans"		
Dat Verification Point of Vontact	Action Plan Description	Relevant Task Action Plan	Date of Status Primary Stakeholder	Gender Equity Gender Inclusion Aspects Addressed	V
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explain how to transfer	pulls info	rmation from the	the	back-end matches the	
	•	l user interface	ord	er in corresponding tab	
data from the input tool	graphica)
into the M&E database	<i>f</i> _s ⊨'Actio	on Plan Information - PRINT	I\$B\$8 Of 1	the M&E database	



Data Input Tools

Database

Dashboa

Hidden lists and other programmed data validation conditions facilitate data accuracy

Example Input Tool

ng drop-down menus in the ta table, select the last filled- rification Points of Contact LastName Points of Contact Enter the name of an individual serving as a POC in the format FirstName LastName (omit middle names).		Action Plan Name Enter the name of the action sh Action Plan Description Provide 3-5 services describ the action plants acope and he declaters	Oeta Verifica Selact the mar who can pro- verification of the person is them to the Points of Cor "People" fab.	me of the industrue ide technical this data entry. E not in the list, hidy Data Verification hidd to the
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Database

Data Input Tools

Dashboar

The M&E Database User Guide explains how to use the Excel-based tool

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Introduction	Workbook Tabs	Now Do L.7 Quick Start	Indicator Data Sheet Guids		sections of int	•	
Purpose This Monitoring & Evalu- performance managem	ation (M&E) Data Collection ent plan (submitted to USAI	1 Tool is designed to capture the D.Uordan under ontract number	e data necëssary to regolt agains AD-OAA-I-13-00018, task order	it the output, outcome, AID-278-TD-13-00003	and impact indicators agreed-upon	in the Energy Sector Capacity Building () in on how to log data in the CCEB M&E Dat	ESCE) activity's a Collection Tool
project data. Other exis	ected to collect the require ing data sources include th	e project's weekly reports and c	ensultant trip reports. Those data	are then logged and a	ggregated in this tool to report again	ave been created and can be used to collex not the indicators described in the ESCB Pt from http://www.tableausoftware.com/produk	/P. These inputs a
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Database

Data Input Tools

Dashb

Data from input tools transfer into indicator-specific spreadsheets formatted to upload into Tableau

Example Indicator Spreadsheet

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Data Input Tools

Database

Dashboa

Validation lists streamline the data cleaning process

Example Data Validation List

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	Definition	_		
On-the-job training	Hands-on, dedicated training for specific individuals within an organization Examples: * Financial Model Training at each DISCO with their nominated staff			
Workshop	Organized group training involving interactive exercises Examples: * Utility Capacity Building Workshop	~		le functionality
Classroom training	Organized group training that is primarily instructor-led <i>Examples:</i> * Lessons Learned from Energy Efficiency, Bulk Procurement, and Replacement Programs around the World presentation		down lists	lynamic drop-
Specific advisory	Specific consultations provided in response to client or counterpart requests. Examples: * renewable energy grid code integration support to NEPCO, ERC; * M&E support for Jordan River Foundation's solar water heater program * PV array system sizing and installations for MPIC and JCD	_		
Other	Examples: * Power Breakfast Executive Seminar			
Note: Working group	meetings, consultations, and focus groups do not qualify as trainings			



TURNING DATA INTO A CONVERSATION

M&E DASHBOARD



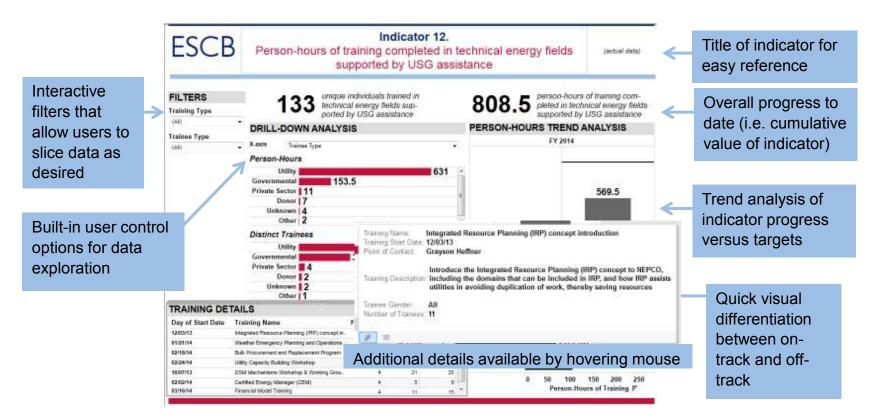
Data Input Tools

ase

Dashboard

The M&E Dashboard summarizes and visualizes the data for each indicator

Example Indicator Dashboard View





Data Input Tools

ase

Dashboard

M&E Dashboard Demonstration



Data Input Tools

Dashboard

The ESCB team will use the M&E dashboard to facilitate quarterly "data learning" meetings

The quarterly data learning meeting, led by the Chief of Party and M&E Advisor, brings together technical teams to review performance data to:

- 1. Identify and understand the drivers of performance
- 2. Share challenges and success stories
- **3.** Identify where action is needed

ESCB is able to make *evidence-based decisions on program implementation* using the performance data reviewed at data learning meetings.





ESCB M&E TOOLKIT QUESTIONS?



APPENDIX



OVERVIEW

M&E RESULTS FRAMEWORK AND INDICATORS



ESCB Results Framework with Indicators: Part 1/2

USAID/Jordan DO#1

Broad-based, Inclusive Economic Development Accelerated

ESCB Program Objective/ CDCS IR1.3			
Management of Energy Resources Improved			
1. Percent of energy efficiency increases at electricity sub- station level due to USG assistance	2. Number of households implementing EE measures as a result of USG assistance		

CDCS Sub-IR 3.1	CDCS Sub-IR3.2	CDCS Sub-IR 3.3
Institutional Capacity and Policies Strengthened	More Efficient Use of Energy Achieved	Uses of Alternative Energy Facilitated
 3. Number of institutions receiving technical assistance due to USG assistance 4. Number of institutions with improved capacity to address clean energy issues as a result of USG assistance 	5. Validated savings from utilities' electric demand due to incentive mechanism demand- side-management/energy efficiency programs 6. Number of ESCOs accredited/licensed	7. Number of megawatts installed through alternative energy projects in Jordan supported by USG assistance

KEY

Blue: Standard USAID Foreign Assistance (F) Indicator Red: USAID/Jordan CDCS Indicator Black: ESCB Custom Indicator



ESCB Results Framework with Indicators: Part 2/2

ESCB Activity IR 1	ESCB Activity IR 2	ESCB Activity IR 3	ESCB Activity IR 4
Institutions equipped to support clean energy	Enabling environment created, providing stakeholders incentive to promote EE	ESCOs are enabled to implement clean energy projects	Respond to Energy Sector Opportunities
8. Number of action plans developed	9. Number of laws, policies, strategies, plans, agreements, or regulations addressing clean energy officially proposed, adopted, or implemented as a result of USG assistance	 8. Number of action plans developed 10. ESCO association created 11. Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources 	TBD

12. Person hours of training completed in technical energy fields supported by USG assistance

KEY

Blue: Standard USAID Foreign Assistance (F) Indicator Red: USAID/Jordan CDCS Indicator Black: ESCB Custom Indicator



ESCB's performance indicators and targets

Indicator	Baseline	FY14 Target	Progress to Date
1. Percent of energy efficiency increases at electricity sub-station level due to USG assistance	0% DSM/EE program not yet implemented	0 DSM/EE programs to begin late FY14	0 DSM/EE programs to begin late FY14
2. Number of households implementing EE measures as a result of USG assistance	0 DSM/EE program not yet implemented	0 DSM/EE programs to begin late FY14	0 DSM/EE programs to begin late FY14
3. Number of institutions receiving technical assistance due to USG assistance	0 Baseline defined to track technical assistance provided through ESCB	20 List of anticipated institutions included in Appendix 1	18
4. Number of institutions with improved capacity to address clean energy issues as a result of USG assistance	0 Baseline defined to track capacity building due to ESCB	0 FY14 is the defined baseline year	0 FY14 is the defined baseline year
5. Validated savings from utilities' forecasted electric demand due to incentive mechanism demand-side-management/energy efficiency programs	0 DSM/EE program not yet implemented	0 DSM/EE programs to begin late FY14	0 DSM/EE programs to begin late FY14
6. Number of ESCOs accredited/licensed	0 Accreditation program not yet implemented	0 Accreditation program to begin FY15 earliest	0 Accreditation program to begin FY15 earliest
7. Number of megawatts installed through alternative energy projects in Jordan supported by USG assistance	N/A To be defined based on Task 4 initiatives	0.15 MW Estimate dependent on known planned solar panel installations	0 0.03 MW in progress (PV installations at MOPIC and JCD)
8. Number of action plans developed	0 Baseline defined to track action plans developed due to ESCB	7 Assumes 3 WG Action Plans, ESCO Action Plan, and 3 Capacity Building Plans (MEMR, ERC, one DISCO)	4 Steering Committee, MEMR, ERC, ESCB Inclusion plan
 Number of laws, policies, strategies, plans, agreements, or regulations addressing clean energy officially proposed, adopted, or implemented as a result of USG assistance 	0 Expected measure will be the utility incentive mechanism	1 At least one agreement with a DISCO reached	0 DSM Framework Recommendations endorsed by SC 4/28/14
10. ESCO association created	No Governing body not yet established	Yes Association to be formed in FY14	No ESCB will support existing relevant associations such as EDAMA
11. Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources	0 Baseline defined to track ESCB gender considerations	30% Based on an estimated approximately 36 female participants out of 120 total	33%
12. Person hours of training completed in technical energy fields supported by USG assistance	0 Baseline defined to track capacity building due to ESCB	1,200 Assumes average of 30 trainees attending 14 three hour trainings planned in Year 1	809 133 unique trainees



IMPLEMENTATION

ROLES AND RESPONSIBILITIES



The technical team plays a critical role in capturing M&E results

ESCB M&E Data Collection and Analysis Lifecycle

M&E Advisor and Technical Team collect data using standardized templates; COP reviews for quality

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M&E Advisor and/or delegate enters data into ESCB M&E database, while reviewing for data quality







M&E team analyzes and visualizes progress towards indicator targets using the M&E dashboard



Technical team discusses analysis findings in regular "data learning" meetings and reports progress to USAID on a quarterly basis



Some indicators are relevant across all task areas



CDCS Sub-IR Level

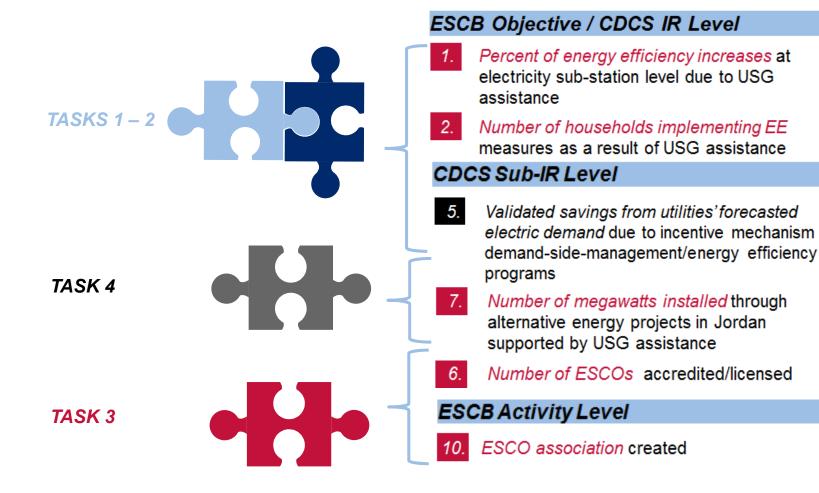
- 3. Number of institutions receiving technical assistance due to USG assistance
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ESCB Activity Level

- 8. Number of action plans developed
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- 11. Proportion of female participants in USGassisted programs designed to increase access to productive economic resources
- 12. Person-hours of training completed in technical energy fields supported by USG assistance



Other indicators are only relevant to certain tasks





The technical team will be responsible for completing data input forms with the M&E Advisor

ESCB Data Input Tools

- Institutional Technical Assistance (TA) Input Tool: captures information of specific advisory and other non-training technical assistance provided by ESCB to energy sector institutions (Indicator 3)
- Renewable Energy Initiative Input Tool: tracks status of renewable energy initiatives technically supported by ESCB (Indicator 7)
- Action Plan Input Tool: tracks status of action plans developed by ESCB with counterpart organizations (Indicator 8)
- Clean Energy Measure (agreements, policies, etc.) Input Tool: tracks status of laws, policies, strategies, plans, agreements, regulations, procedures, or rules related to clean energy for which ESCB provides support (Indicator 9)
- Gender Activity Input Tool: captures information, including participant data, about activities designed to increase access to productive economic resources for females (Indicator 11)
- Training Input Tool: captures information, including participant data, about trainings conducted by ESCB to build the capacity of energy sector players (Indicator 12)